CE 0700

GREEN RUNNER

the fine art of moving

USER'S MANUAL

The company Ag. Ing. Pini s.r.l., acting as importer and responsible of introduction on the market of the product Robin-M1S, declares that the transmitter and receiver included in the package are compliant with Directive 1999/05/EC.

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1. Technical parameters

Max cruise speed: 15 Km/h
Min turning radius: 0°
Net weight: 18.5 Kg
Distance (after single charging): 20 Km
Charging time: 1-3 h (3 hours for a complete charge)
Charging voltage: 110V-240V, 50-60 hertz
Charging consumption: 0,4 Kw/hr
Max load: 100 Kg
Max climb capability: 15 degree
Battery: 48v 40ah lithium
Lifetime of battery: 3-5 years
Custom warranty: 2 years
Other warranty: 1 year or 2.000 Km
Full lifetime: 35.000 Km
Power: 2x1.300 Watts

Received CE & ROHS & FCC certifications

2. Installation of Green Runner

In this part, we will talk about the parts of Green Runner and how to install Green Runner.

2.1 List of spare parts

Please check the package of Green Runner and make sure that all spare parts are complete. The spare parts of Green Runner are listed as follows, if any of them missing, please contact with the *Agenzia ing Pini srl*.

1) car body
2) handlebar grip
3) handlebar stem
4) charger
5) tool and screws bag (which contains of erecting tools and 10 screws)
6) two remote keys
7) user's manual
8) warranty card
9) cd with teaching videos

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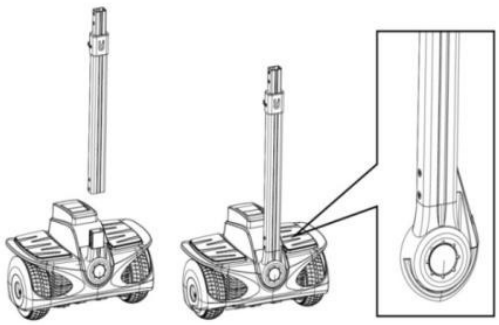
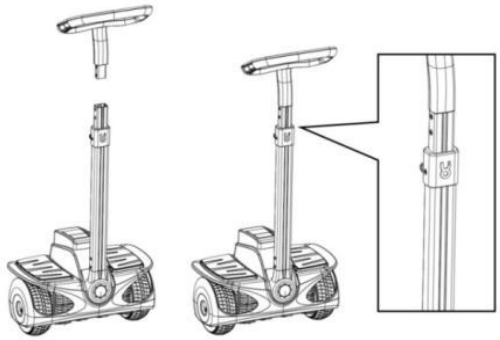
2.2 Installing Green Runner

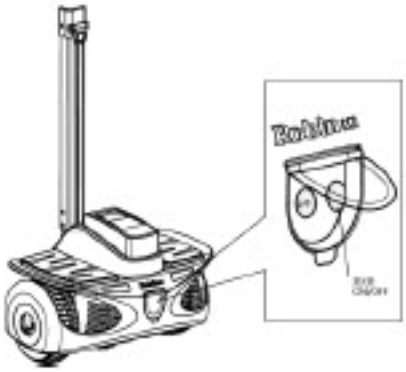
1) Put the handlebar stem into the adapter and tighten it up with 4pcs of screws as follows.



NOTE: if Green Runner is equipped with quick release (optional), insert the handlebar stem into the locking component, and fix it using the clip of the locking component.



2) put the handlebar grip into the adapter of the handlebar stem and tighten it up with 4pcs of M5 screws as follows.



3) press the power-open button behind the car boby of Green Runner to turn it on.

Please make sure that the power is off when you conducting any maintenance or installation of Green Runner

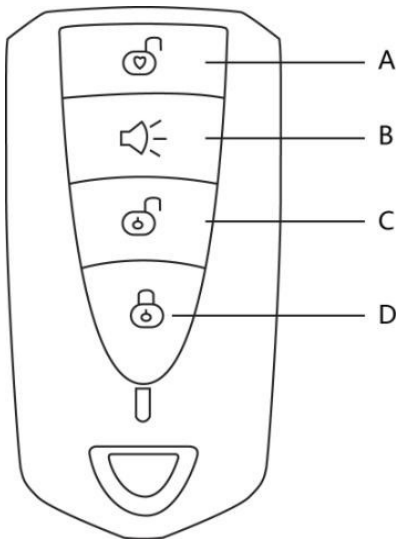
3. Controlling Green Runner and the display board

3.1 Remote control of Green Runner

Remote control of Green Runner is a long-distance equipment of controlling, you can make a control of Green Runner within 10 meters.

- **Button A**: *Beginner* mode: pressing this button so you can enter into the beginner model which speed limit within 7km per hour. If you don't use it for more than 10minutes, then Green Runner will shut down automatically.
- **Button B**: *Warning & locking* mode: pressing the button so Green Runner itself can keep locked and send notice with bumming and vibrating while someone else is attempt to move it. If you want to unlock it, just press it again.
  However, if you kept the Green Runner in state of bumming within 24hours, it will turn off automatically.

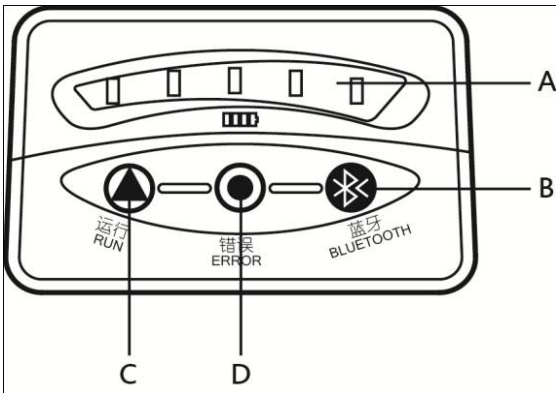
- **Button C**: *Normal* mode: you have to turn off the *beginner* mode when you want a *normal* mode. Turn off the power and then turn it on so you can enter into the second mode with speed limit within 15km per hour.
- **Button D**: *Shutdown*: press the button and Green Runner will be power off.
- **Button A + C**: press button A and C within 5seconds can enter into the model of self-checking.
  In the state of *self-checking*, you will hear the bumming sound and all five lights keep flickering. The system of Green Runner itself will conduct a series of self-checking, in the mean whilw, the wheels will turn on automatically in a slow speed. If there is no problem after the self-checking, the system will recover to the *normal* mode. Otherwise, warning sound of beeping will come from the buzzer and it will turn off automatically. Under this condition, we insist that you should send the Green Runner to *Agenzia ing Pini,* or contact them.



3.2 Display board

The display board of Green Runner is fixed on the top of the battery. It shows informations about Green Runner during riding.

- **A**: display board of electrical quantity.
  Normally, all five lights will keep brightening when the power is sufficient. Five lights means Green Runner is fully charged, four means there is 60-80% power left. Under the charging mode, five lights will flicker one by one, and when the charging is over, all of them will flickering at the same time.
- **B**: indicator light of *Bluetooth*
- **C**: *green light*: i twill keep shining when it's under the opening mode which means the system is under a normal state, otherwise, i twill turn off with indicaton that there is something wrong with the system.



- **D:** *red light Error*: when you find the indicator light turning red, that means the system goes wrong and you should seek help from *Agenzia ing Pini srl*.

4. Learn how to ride Green Runner

You need to note some related safety matters before riding Green Runner. It's very important for yo to understand all safety matters mentioned inside the user's manual.

4.1 Start Green Runner

- If it is the your first time to start Green Runner, or after a period of inactivity, please press the button behind Green Runner body.
- The second time, you can turn on and off Green Runner by using wireless key directly.

4.2 Safe parking

- When there is an incorrect operation or the power consumption reaches the minimum quantity within normal riding, the system will then generate a secure parking information, meanwhile Green Runner will have a high-frequency vibration, then Green Runner can automatically slow to a stop.

Warning: if the battery power reaches the minimum limit and the user continue to ride Green Runner, otherwise Green Runner can't keep the equilibrium because of power shortages, in which case the user is likely to be injured.

Warning: If the battery power reaches the minimum limit and the user coninues to ride Green Runner, the battery life and its capacity will be affected.

4.3 Riding steps:

- **Step 1: Starting Green Runner**

Press the button of th eback cover to start Green Runner, then you can see the indicator lighting. Indicator flashing indicates the start is normal.

- **Step 2: Pre-commissioning on the geen Runner**

There are 4 sensors under the pads, which can sense whether the user is on the green Runner or not.
According to the tilt relation between the Green Runner and the user, there are two situations:

(1) *Green Runner tilts more*: the user puts one foot on the pad at this time, then green Runner will shake to tell user the tilt angle is too large, please don't get on Green Runner.

(2) Green *Runner tilts less:* the user puts one foot on the pad at this time, Green Runner can quickly and automatically balance to the vertical posture after the sensors sense the user.
The buzzer gives out "drip" sound, which indicates that the system has entered the manned work mode.

- **Step 3: Get on Green Runner, control Green Runner forward and backward**

Put one foot on Green Runner gently firt, then the other foot.
The user should keep the balance of body gravity when standing on Green Runner, which can make Green Runner keep motionless. Lean your body gently forward or backward to make Green Runner forward or backward, please remember the body amplitude is not too big.

- **Step 4: Control Green Runner turn left or right**

Lean the handlebar left or right to make Green Runner turn left or right.

- **Step 5: Get off Green Runner**

Keep Green Runner motionless and balanced before getting off from it.
Get off one foot first, then the other one.

5. Istructions of battery of Green Runner

This part mainly descrive how can you get Green Runner charging at home, how to take good care of the battery, needed precautions and specifications of battery.

5.1 Zero power

Please stop riding Green Runner when you find all lights shut down. At the time, the system will gradually slow down, and within 7seconds shut down automatically. If you insist the riding, you may fall from Green Runner and get injuries and cause damage to the battery.

You should stop using the battery under any of these conditions listed follow:

- The battery is broken.
- Peculiar smell came out from Green Runner or it's overheat.
- Only technicians can make maintenance with the battery.
- Never touch the leaking material that came from the Green Runner.
- Never let children and animals touch the battery in case of any injuries.
- Make sure that the power line is off from Green Runner before riding and never do anything with Green Runner while it's charging.
- There are toxic substances inside the battery, so never be attempate to open it or unclench it whit any equipments or ever put any other material into the battery.

5.2 Procedures of charging

- Open the charging port behind the Green Runner
- Make sure that the charging port is dry

- Plunge one side into the charging port of Green Runner and the other side into the electric power source.
- If the lights keeping shining one by one from the display board, it means it's under normal condition. Otherwise, please take a double check with the power lines.
- It is fully charged when the red lights and the green light are shining at the same time.
- Please stop charging in that charging too long might affect the service life of the battery
- Battery charging or storage for very long time will make damage to the battery ifself and have bad impact on the usage of it.
- We suggested that the time of charging of Green Runner should be three hour once a time.
- Keep the environment dried and clean during charging.
- Never put the plug into the charging port if you find it wet.

5.3 Conditions related to overhead or too slow in temperature of the battery

- In order to keep the efficiency operation high, please ensure that the temperature of the battery remaining within certain ranges specified in the instructions.
- In case of overheat during riding, the system will make a safety warning.
- Please keep the temperature in certain area before charging or during charging. The efficiency of operation will be best when the temperature near recommended degrees, otherwise, it might lengthen the charging time.

5.4 Specification of the battery

Battery tipe	Lithium battery
Cahrging time	3 hours
Voltage	48 V
Weight	3.4kg
Beginning volume	40 ah
Size	165 x 145 x 85 (mm)
Operating temperature	-15°~50°
Charging temperature	-15°~50°
Storage (-20° ~ 25°)	12 months
Storage relative humidity	5% ~ 95%

5.5 Precautions of battery transportation

- Lithium battery is considered to be toxic material by most countries, make sure that you are lawfully permitted before you transport it to any other places.
- If you intend to transport the battery by flight or any other types of shipping, please contact with the local authorized agent for inquiries information about transportation of hazard material.

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HANDBOOK FOR THE CORRECT USE OF LITHIUM BATTERIES:

KEEP A LITHIUM BATTERY PROPERLY IN THE EVENT OF UNUSED:

If you do not plan to use the battery for a long time you need to take some precautions.

Store it in a cool place and charge it at least up to 40% at least once a month.

The battery should be stored at 40% charge (never fully discharged) and once again you have to use it fully charge before use.

THINGS TO DO - Always keep the battery in a cool environment. Being sensitive to heat avoid, for example, to leave it inside a car in summer scorched by the sun! .

- If you have two batteries, use a more up to the end of its life while retaining the other in a cool place.

THINGS TO DO NOT DO - Do not ever download the battery fully, that is below 20% or when the device will confirm that you discharge. The complete discharge immediately ruins the battery may no longer work.

- Always avoid the heat. The battery will not tolerate it takes more and more heat will ruin.

- Do not buy extra batteries for future use. If you buy an extra battery, always make sure when it was built to understand how much time was left inert in warehouses.

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